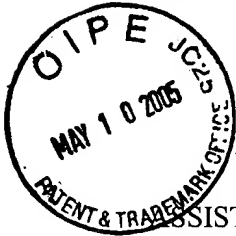


NEIFELD IP LAW, P.C.
4813-B Eisenhower Avenue
Alexandria, Virginia 22304

Tel: 703-415-0012
Fax: 703-415-0013
Email: rneifeld@Neifeld.com
Web: www.Neifeld.com



**TRANSMITTAL LETTER AND
AUTHORIZATION TO CHARGE DEPOSIT ACCOUNT**

ASSISTANT COMMISSIONER FOR PATENTS
ALEXANDRIA, VA 22313

RE: Attorney Docket No.: PIP-69B-KATZ
Application No.: 09/828.122
Filed: April 9, 2001
Inventor: KATZ
Group Art Unit: 3622
Examiner: Charles
Title: Paired Promotion Architecture

SIR:

Attached hereto for filing are the following papers:
37 CFR 41.33(d)(1) Submission of Evidence After Appeal
37 CFR 41.37 Appeal Brief
Attachments 1-4

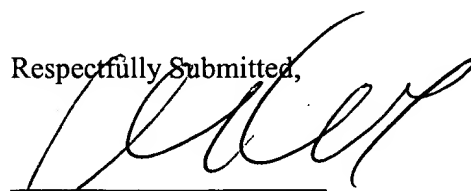
Our check in the amount of \$0.00 is attached covering the required fees.

The Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 50-2106. A duplicate copy of this sheet is enclosed.

DATE

5/10/2005

Respectfully Submitted,


Richard A. Neifeld, Ph.D.
Registration No. 35,299
Attorney of Record



NEIFELD REF.: PIP-69B-KATZ

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF: KATZ

USPTO CONFIRMATION CODE: 5972

APPLICATION NO.: 09/828,122

FILED: April 9, 2001

EXAMINER: Charles

GROUP ART UNIT: 3622

FOR: Paired Promotion Architecture

37 CFR 41.33(d)(1) SUBMISSION OF EVIDENCE AFTER APPEAL

ASSISTANT COMMISSIONER FOR PATENTS

ALEXANDRIA, VA 22313

Sir:

This brief contains new evidence in the form of exhibits 2-4, as the exhibits are not contained in the record. The applicant submits, pursuant to 37 CFR 41.33(d)(1) that these definitions contained in exhibits 2-4 are necessary to clarify the examiner's rejections and to clarify the applicant's response to said rejections. The applicant is filing a request that if the examiner declines to admit exhibits 2-4, that the applicant be permitted to file a supplemental appeal brief which does not rely on the non-admitted items of evidence.

5/12/2005

DATE

Respectfully Submitted,

Richard A. Neifeld, Ph.D.

Registration No. 35,299

Attorney of Record

Date/Time: May 10, 2005 (8:19pm)

Y:\Clients\Catalina\PIP-69B-KATZ\PIP-69B-KATZ\Drafts\RequestToAdmit_050510.wpd



NEIFELD DOCKET NO: PIP-69B-KATZ-US

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF: Gary M. KATZ

CONF. NO: 5972

GROUP ART UNIT: 3622

SERIAL NO: 09/828,122

FILED: April 9, 2001

EXAMINER: RETTA

FOR: Paired Promotion Architecture

ASSISTANT COMMISSIONER FOR PATENTS

ALEXANDRIA, VA 22213-1450

37 CFR 41.37 APPEAL BRIEF

Sir:

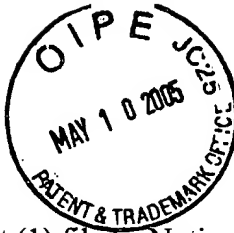
In response to the office action mailed December 13, 2004, the applicants appeal.



Table of Contents

I.	37 CFR 41.37 (a)(1) and (2)	1
II.	37 CFR 41.37 (b)	1
III.	37 CFR 41.37 (c)(1)	1
A.	37 CFR 41.37 (c)(1)(i) Real Party in Interest	1
B.	37 CFR 41.37 (c)(1)(ii) Related Appeals and Interferences	1
C.	37 CFR 41.37 (c)(1)(iii) Status of Claims	1
D.	37 CFR 41.37 (c)(1)(iv) Status of Amendments	1
E.	37 CFR 41.37 (c)(1)(v) Summary of the Claimed Subject Matter	1
F.	37 CFR 41.37 (c)(1)(vi) Grounds of Rejection to be Reviewed on Appeal	2
G.	37 CFR 41.37 (c)(1)(vii) Argument	3
1.	The Examiner's Rejections of Claims 1-19, 26, 28, 35-40 and 53-56 Under 35 USC 101 for Defining non-Statutory Subject Matter are Improper and Should be Reversed	3
2.	The Examiner Misconstrued the Claims	4
3.	The Examiner Misapplied the 35 USC 101 Technological Arts Law	6
4.	The Examiner's Rejections of Claims 1-58 Under 35 USC 102(e) as Being Anticipated by Deaton are Improper	9
5.	The Examiner's Rejections of Claims 6 and 27 are Improper Because Deaton does not Disclose a Promotion Usage Denominator Based Upon Where Promotions are Exercised	11
6.	The Examiner's Rejections of Claims 7-9, 11, 13-19, 27, 32, 39, and 40 are Improper Because Deaton does not Disclose Basing Relevancy of Promotions on a Demographic Characteristic of a Consumer	13
a.	The Rejection of Claim 7	13
b.	Deaton does not Disclose the Additional Limitations of Dependent Claims 8, 9, 11, and 13-19	20
(1.)	Claim 8	21

(2.)	Claim 9	21
(3.)	Claim 11	21
(4.)	Claim 13	22
(5.)	Claim 14	22
(6.)	Claim 15	22
(7.)	Claim 16	22
(8.)	Claim 17	22
(9.)	Claim 18	23
(10.)	Claim 19	23
7.	The Rejections of Claims 24, 25, and 49-52 are Improper (1) for the Same Reasons the Rejection of Claim 7 is Improper and (2) Because Deaton does not Disclose Pairing Promotions Based Upon a Demographic Characteristic	23
8.	The Rejections of Claims 35-58 are Improper Because Deaton does not Disclose Either (1) Exercising the First Low Relevance Promotion with the Second Promotion or (2) Displaying Together a First Low Relevance Promotion with a Second Promotion	24
H.	37 CFR 41.37 (c)(1)(viii) Claims Appendix	34
I.	37 CFR 41.37 (c)(1)(ix) Evidence Appendix	34
J.	37 CFR 41.37 (c)(1)(x) Related Proceedings Appendix	34
IV.	37 CFR 41.37 (c)(2)	34
V.	37 CFR 41.37 (d)	35
VI.	37 CFR 41.37 (e)	35
	Appendix I	36



I. **37 CFR 41.37 (a)(1) and (2)**

On March 10, 2005, the applicant (1) filed a Notice of Appeal under 41.31 and (2) paid the fee set forth in 41.20(b)(1) and 41.20(b)(2).

II. **37 CFR 41.37 (b)**

The filing is timely. Accordingly, this subsection is not relevant.

III. **37 CFR 41.37 (c)(1)**

A. **37 CFR 41.37 (c)(1)(i) Real Party in Interest**

The real party in interest is Catalina Marketing International, Inc., a Delaware corporation, which is wholly owned by Catalina Marketing Corporation, a Florida corporation.

B. **37 CFR 41.37 (c)(1)(ii) Related Appeals and Interferences**

There is a related appeal in attorney docket number PIP-69A-KATZ; application serial no. 09/776,714. An appeal was filed April 7, 2005, which is not yet docketed at the BPAT.

C. **37 CFR 41.37 (c)(1)(iii) Status of Claims**

Claims 1-58 are pending, rejected, and under appeal.

D. **37 CFR 41.37 (c)(1)(iv) Status of Amendments**

All amendments are entered.

E. **37 CFR 41.37 (c)(1)(v) Summary of the Claimed Subject Matter**

The invention of claim 7 defines a computer-implemented method for increasing the likelihood that a first low relevance promotion will be exercised by a consumer (page 3 lines 17-23), comprising: receiving identification information from said consumer (page 8 lines 8-9); determining a demographic characteristic of said consumer using said received identification information (page 20 line 28 through page 21 line 3); selecting a second promotion determined to be more relevant to said consumer identified by said identification information based upon said

demographic characteristic of said consumer (page 20 lines 18-19); and pairing said first low relevance promotion with said second promotion (page 21 lines 16-17).

The invention of claim 24 defines a system for increasing the likelihood that a first low relevance promotion will be exercised by a consumer (page 3 lines 17-23), comprising: means for receiving identification information from said consumer (page 21 lines 7-9); means for determining a demographic characteristic of said consumer using said identification information received by said means for receiving (page 9 lines 11-15); means for selecting a second promotion determined to be more relevant to said consumer identified by said identification information based upon said demographic characteristic of said consumer (page 20 lines 18-19); and means for pairing said first low relevance promotion with said second promotion (page 21 lines 16-17).

The invention of claim 25 defines a system for increasing the likelihood that a first low relevance promotion will be exercised by a consumer, comprising (page 3 lines 17-23): an identification input device configured to receive identification information from said consumer (page 21 lines 7-9); a demographic database including a demographic characteristic of said consumer, said demographic characteristic queried by said received identification information (page 20 lines 18-19); a potential second promotion database including a plurality of potential second promotions (page 22 lines 9-12); and a processor configured to select a second promotion having a high relevance to said consumer from said plurality of potential second promotions based on said demographic characteristic and to pair said second promotion with said first low relevance promotion (page 22 lines 23-26).

F. 37 CFR 41.37 (c)(1)(vi) Grounds of Rejection to be Reviewed on Appeal

Whether the rejections of claims 1-19, 26, 28, 35-40, and 53-56 under 35 USC 101 for allegedly defining non-statutory subject matter are improper and should be reversed.

Whether the rejections of claims 6-9, 11, 13-19, 24, 25, 27, 32, and 35-58 under 35 USC 102(e) as allegedly being anticipated by Deaton et al. 6,334,108 (hereinafter "Deaton") are improper and should be reversed.

G. 37 CFR 41.37 (c)(1)(vii) Argument

1. The Examiner's Rejections of Claims 1-19, 26, 28, 35-40 and 53-56 Under 35 USC 101 for Defining non-Statutory Subject Matter are Improper and Should be Reversed

The examiner rejects claims 1-19, 26, 28, 35-40 and 53-56 under 35 USC 101 because the claimed invention is allegedly directed to non-statutory subject matter, stating that:

The independently claimed steps of receiving, determining, selecting and pairing information do not require structural interaction or mechanical intervention such that the invention falls within the technological arts permitting statutory patent protection. The claimed step of receiving, determining, selecting and pairing information does not apply, involve, use or advance the technological arts since all of the recited steps can be performed in the mind of user or by use of a pencil and paper. Claims reciting those steps can be performed by interpersonal communications such that the claimed steps can be performed without a physical structure or mechanical object. The method only constitutes an idea of pairing promotions.

As the technological arts recited in the preamble, mere recitation in the preamble (i.e., intended or filed [sic] of use) or mere implications of employing a machine or article or manufacture to perform some or all of the recited steps does not confer statutory subject matter to an otherwise abstract idea unless there is positive recitation in the claim as a whole to breathe life and meaning into the preamble. Nothing in the body of the claim, recites any structure or functionality to suggest that a computer performs the recited steps. Therefore, the preamble is taken to merely recite a field of use.

Additionally, for a claimed invention to be statutory the claimed invention must produce a useful, concrete and tangible result. In the present case, the claimed invention produces promotion (i.e., repeatable) prediction (i.e., useful [and] tangible). Although the recited process produces a useful, concrete and

tangible result, since claimed invention, as a whole, is not with the technological art as explained above, the claims are deemed to be directed to non-statutory matter. [Office action mailed December 13, 2004 page 2 line 20 through page 3 line 19; interpolation added.]

In response, the applicant points out that the examiner has (1) improperly construed the claims and (2) misapplied the law respecting 35 USC 101 and its doctrine respecting "technological arts."

2. The Examiner Misconstrued the Claims

In point of fact, claims 1-19, 26, 28, 35-40, and 53-56 are specifically limited to a computer implemented method, reciting "A computer-implemented method...."

The examiner's conclusion is flawed because the examiner has improperly construed the claims by reading out the limitation of the preamble and ignoring the specification.

The examiner's conclusion based upon claim construction, which is that "all of the recited steps can be performed in the mind of user or by use of a pencil and paper," is incorrect. Performing all of the steps "in the mind of user or by use of a pencil and paper" is not subject matter defined by "A computer-implemented method...." as defined by claims 1-19, 26, 28, 35-40, and 53-56. Accordingly, the examiner's claim construction flies in the face of common sense.

The examiner's allegation relating to claims 1-19, 26, 28, 35-40, and 53-56, which is that the claims define "mere implications of employing a machine or article or manufacture to perform some or all of the recited steps does not confer statutory subject matter to an otherwise abstract idea unless there is positive recitation in the claim as a whole to breathe life and meaning into the preamble" is a combination of implied conclusions on claim construction applied to the technological arts test, and the implied conclusions on claim construction are incorrect. The examiner's implied conclusion on claim construction is that the recitation of the preamble of "A computer implemented method ..." (i.e., the preamble) provides a "mere implication" of "employing a machine or article or manufacture to perform some or all of the recited steps." The

word "mere" means, according to the Web version of the Compact Oxford English Dictionary (at URL: http://www.askoxford.com/concise_oed/mere_1?view=uk): "adjective 1 that is nothing more than what is specified. 2 (the merest) the smallest or slightest." In other words, the examiner states that the preamble "'A computer implemented method ...' means only a minimal implication that the subject matter defined by claim is 'computer implemented.'"

In response, the applicant disagrees with the examiner's conclusion that claims reciting "A computer implemented method ..." is not limited to methods implemented with a computer. Words have meaning. The written words of the claim cannot be ignored.

Moreover, the examiner states that:

As the technological arts recited in the preamble, mere recitation in the preamble (i.e., intended or filed [sic] of use) or mere implications of employing a machine or article or manufacture to perform some or all of the recited steps does not confer statutory subject matter to an otherwise abstract idea unless there is positive recitation in the claim as a whole to breathe life and meaning into the preamble. Nothing in the body of the claim, recites any structure or functionality to suggest that a computer performs the recited steps. Therefore, the preamble is taken to merely recite a field of use. [Office action mailed December 13, 2004 page 3 lines 7-13.]

The examiner's remarks contain an erroneous statement of the law of claim construction. Specifically, the statement "unless there is positive recitation in the claim as a whole to breathe life and meaning into the preamble" is an incorrect and backward statement of the law of claim construction. The law states that the preamble is a limitation when the preamble breathes life and meaning into the claim. See, Corning Glass Works v. Sumitomo Elec. U.S.A., Inc., 868 F.2d 1251, 1257, 9 USPQ2d 1962, 1966 (Fed. Cir. 1989). The Court of Appeals for the Federal Circuit stated that this interpretation is binding on the USPTO, and therefore upon the examiner, in Rowe v. Dror, ___ F.3d ___, ___, 42 USPQ2d 1550, 1553-54 (Fed. Cir. 1997), stating that:

Where a patentee uses the claim preamble to recite structural limitations of his claimed invention, the PTO and courts give effect to that usage. See *id.*; Corning Glass Works v. Sumitomo Elec. U.S.A., Inc., 868 F.2d 1251, 1257, 9 USPQ2d 1962, 1966 (Fed. Cir. 1989). Conversely, where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention, the preamble is not a claim limitation. See Bell Communications, 55 F.3d at 620; Kropa v. Robie, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).¹

Therefore, the examiner, by implication from statements in the office action at page 2 line 20 to page 3 line 6 admits that it is necessary to give meaning to the preamble "computer implemented" recitation in order to define an invention so implemented, and therefore applicable CAFC law requires these claims be construed as methods performed using computers. Thus, the examiner's claim construction reading out computer implementation from the claims is improper and incorrect. Therefore, the examiner's conclusions on 35 USC 101 are incorrect. Accordingly, the rejections of claims 1-19, 26, 28, 35-40, and 53-56 under 35 USC 101 for defining non-statutory subject matter are improper and should be reversed.

3. The Examiner Misapplied the 35 USC 101 Technological Arts Law

Moreover, the examiner's statement of the law relating to the technological arts is incorrect. In the office action mailed December 13, 2004 page 3 lines 7-13, the examiner states that:

¹As re-stated in the MPEP at 2111.02: "[A] claim preamble has the import that the claim as a whole suggests for it." Bell Communications Research, Inc. v. Vitalink Communications Corp., 55 F.3d 615, 620, 34 USPQ2d 1816, 1820 (Fed. Cir. 1995). "If the claim preamble, when read in the context of the entire claim, recites limitations of the claim, or, if the claim preamble is 'necessary to give life, meaning, and vitality' to the claim, then the claim preamble should be construed as if in the balance of the claim." Pitney Bowes, Inc. v. Hewlett-Packard Co., 182 F.3d 1298, 1305, 51 USPQ2d 1161, 1165-66 (Fed. Cir. 1999).

As the technological arts recited in the preamble, mere recitation in the preamble (i.e., intended or filed [sic] of use) or mere implications of employing a machine or article or manufacture to perform some or all of the recited steps does not confer statutory subject matter to an otherwise abstract idea unless there is positive recitation in the claim as a whole to breathe life and meaning into the preamble. Nothing in the body of the claim, recites any structure or functionality to suggest that a computer performs the recited steps. Therefore, the preamble is taken to merely recite a field of use. [Office action mailed December 13, 2004 page 3 lines 7-13.]

Specifically, the examiner's statement "employing a machine or article or manufacture to perform some or all of the recited steps does not confer statutory subject matter to an otherwise abstract idea" is an incorrect statement of the law. 35 USC 101 is the law. Judicial construction of 35 USC 101 provides one test for compliance with the utility prong of 35 USC 101; the "useful, concrete, and tangible" result test specified by the Court of Appeals for the Federal Circuit, which the examiner admits (at office action mailed December 13, 2004 page 3 lines 14-19) is satisfied by claims 1-19, 26, 28, 35-40, and 53-56.

The examiner alleges that claims 1-19, 26, 28, 35-40, and 53-56 do not satisfy the "within the technological arts" doctrine approved by the Board of Patent Appeals and Interferences in Ex parte Bowman, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001), 2001 Pat App. Lexis 46 (BPAI June 12, 2001)².

In response, the applicant submits that the examiner is incorrect. Ex parte Bowman indicates "employing a machine or article or manufacture to perform some or all of the recited steps" does satisfy 35 USC 101's utility requirement. Thus, the examiner's conclusion is clearly inconsistent with the Board of Patent Appeals and Interference's published decision in Bowman. In Bowman, a panel of the Board held that the technological arts test was not satisfied only if the specification and claims did not limit the claimed invention to being computer implemented,

² Attachment 1 is a copy of Ex parte Bowman, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001), 2001 Pat App. Lexis 46 (BPAI June 12, 2001).

stating in pertinent part that (emphasis of the pertinent passage added):

With respect to the rejection under 35 U.S.C. § 101, the examiner asserts that the claimed invention does not fall within the technological arts because no form of technology is disclosed or claimed [answer, page 3]. *** The examiner responds that ... appellant has not recited the use of a computer in either the specification or the claims. The examiner finds that neither the specification nor the claims discuss the use of any technology with respect to the claimed invention [answer, pages 5-6].

We agree with the examiner. Appellant has carefully avoided tying the disclosed and claimed invention to any technological art or environment. As noted by the examiner, the disclosed and claimed invention is directed to nothing more than a human making mental computations and manually plotting the results on a paper chart [answer, page 5]. The *Examination Guidelines for Computer-Related Inventions are not dispositive of this case because there is absolutely no indication on this record that the invention is connected to a computer in any manner.* *** In summary, we find that the invention before us is nothing more than an abstract idea which is not tied to any technological art, environment, or machine, and is not a useful art as contemplated by the Constitution of the United States. The physical aspects of claim 1, which are disclosed to be nothing more than a human manually drawing a chart and plotting points on this chart, do not automatically bring the claimed invention within the technological arts. For all the reasons just discussed, we sustain the examiner's rejection of the appealed claims under 35 U.S.C. § 101. [Ex parte Bowman, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001), 2001 Pat. App. Lexis 46 (BPAI June 12, 2001).]

Thus, Ex parte Bowman held that (1) claims that did not limit the claimed invention to being computer implemented and (2) a supporting specification that contained no computer implemented embodiment of any limitation claimed failed to comply with an alleged

technological arts requirement in 35 USC 101. Ex parte Bowman, therefore, indicates by negative implication that when either the claims recite a technological limitation, such as a computer, or the specification discloses an embodiment in which limitations defined by the claims are performed by technology, such as computer technology, the claimed subject matter as a whole is statutory.

In contrast here, the rejected claims 1-19, 26, 28, 35-40, and 53-56 define computer implementation, and the specification of this application discloses only computer implementation; see the brief description of Figures 1 and 2 noting network implementation, and the description at pages 6 and 7 of computer hardware for that network. Thus, claims 1-19, 26, 28, 35-40, and 53-56 are useful, in the technological arts, and therefore constitute patentable subject matter within the meaning of 35 USC 101. Therefore, the rejections based upon 35 USC 101 should be reversed.

4. The Examiner's Rejections of Claims 1-58 Under 35 USC 102(e) as Being Anticipated by Deaton are Improper for Claims 6-9, 11, 13-19, 24, 25, 27, 32, and 35-58

The examiner rejected claims 1-58 under 35 U.S.C. 102(e) as being unpatentable over Deaton, stating that:

Regarding claim 1, Deaton teaches receiving identification information; determining a purchase history based upon the identification information, selecting a second promotion determined to be more relevant and paring the promotions (see fig. 43 and col. 119 and col. 149 line 43 to col. 150 line 18).

Regarding claims 2 and 3, Deaton teaches frequency of purchases or number of purchase (see col. 147 line 45 to col. 149 line 15).

Regarding claim 4, Deaton teaches receiving identification, determining promotion usage denominator using the received information; selecting a second promotion based upon promotion usage denominator and pairing the two promotions (see fig 38 and col. 97 line 39 to col. 98 line 31).

Regarding claims 5 and 6, Deaton teaches the usage denominator relates to

a value of promotions and the location of the promotions exercised by consumer (see col. 115 lines 41 to col. 116 line 21 and fig. 43-45).

Regarding claims 7-19, Deaton teaches receiving identification information; determining a demographic characteristic based upon the identification information, selecting a second promotion determined to be more relevant and pairing the promotions... (see fig. 43-45, col. 63 lines 7-67 and col. 119 and col. 149 line 43 to col. 150 line 18).

Claims 20 and 21 are rejected as stated above in claim 1.

Claims 22 and 23 are rejected as stated above in claim 4.

Claims 24 and 25 are rejected as stated above in claim 7.

Regarding claim 26 and 27, Deaton teaches receiving promotion information regarding first low relevance and second promotion, pairing the promotions and identifying the customer likely to exercise said second promotion and providing the consumer with the paired promotions (see fig. 43-45 and col. 118 line 65 to col. 123 line 23).

Regarding claims 28 and 29, Deaton selecting a first promotion determined to be more relevant to a consumer based on purchase history data; determining a second promotion determined to be less relevant to said consumer base upon said purchase history data; pairing said first promotion with said second promotion; and providing the paired promotions to said consumer (see fig. 43-45 and col. 118 line 65 to col. 123 line 23).

Regarding claims 30-34, Deaton teaches the determining and selecting is computer implemented (see fig 1-3).

Regarding claims 35-58, Deaton teaches exercising the low relevance and the second promotion and displaying together both promotion (see col. Fig 32-34).
[Office action mailed December 13, 2004 page 4 line 13 through page 5 line 22.]

The applicant believes that the examiner's rejections of claims 6, 7-9, 11, 13-19, 24, 25, 27, 32, and 35-58 are improper for the following reasons.

**5. The Examiner's Rejections of Claims 6 and 27 are Improper
Because Deaton does not Disclose a Promotion Usage
Denominator Based Upon Where Promotions are Exercised**

In support of the rejections of claims 5 and 6, the examiner states that:

Regarding claims 5 and 6, Deaton teaches the usage denominator relates to a value of promotions and the location of the promotions exercised by consumer (see col. 115 lines 41 to col. 116 line 21 and fig. 43-45). [Office action mailed December 13, 2004 page 4 lines 23-25.]

In response, the applicants submit that denominator, corresponding to the usage in the claim, is defined as the "average level."³ That is a statistical function providing an average value for a set of values. The subject application defines a promotion usage denominator on page 20 lines 20-24, stating that:

In another exemplary embodiment, the determination of the relevance of a promotion is made by examining the promotion usage history of the consumer. A "promotion usage denominator" that relates to, e.g., the products for which promotions are exercised, the value (relative or absolute) of promotions that are exercised, and/or location where promotions are exercised can be used to determine the relevancy of a promotion to the consumer. [Specification page 20 lines 20-24.]

³Attachment 2 is a copy of the definition of "denominator" as defined by the Merriam-Webster OnLine Dictionary, <http://www.m-w.com/cgi-bin/dictionary?book=Dictionary&va=denominator>, viewed May 10, 2005. This evidence is not contained in the record. The applicant submits, pursuant to 37 CFR 41.33(d)(1) that this definition is necessary to clarify the examiner's rejections and to clarify applicant's response to said rejections. The applicant has filed a separate request herewith requesting that if the examiner declines to admit this evidence, that the applicant be permitted to file a supplemental appeal brief which does not rely on this piece of evidence.

This passage indicates that “usage denominator” is in fact a statistical averaging function of the variables “ the products for which promotions are exercised, the value (relative or absolute) of promotions that are exercised, and/or location where promotions are exercised.” Therefore, “determining a denominator” means either generating a value by applying a denominator function to product ID, promotion value, and/or exercise location values associated with a consumer’s redeemed promotions. These concepts are distinct from what Deaton discloses.

In support of his conclusion that Deaton discloses determining a usage denominator that “relates to a location where promotions are exercised by said consumer,” as recited in claim 6, the examiner cites to Deaton col. 115 lines 41 to col. 116 line 21 and Deaton fig. 43-45.

Column 115 lines 45-46 in Deaton states that:

Historical shopping activity is transferred between stores to ensure purchases at all locations is merged. [Deaton column 115 lines 45-46.]

In column 115 lines 45-46, Deaton discloses obtaining information from individual stores. However, Deaton does not disclose the using each individual store’s information to generate a value associated with a consumer’s redeemed promotions at each individual store. In fact, in the passage Deaton discloses merging the information from the individual stores so that Deaton can analyze an aggregate of the information. This runs counter to the recitation in claim 6 of “said promotion usage denominator relates to a location where promotions are exercised by said consumer.”

Moreover, figures 43-45 in Deaton do not disclose determining a usage denominator that “relates to a location where promotions are exercised by said consumer,” as recited in claim 6. Figure 43 at column 119 lines 7-8 discloses “shopping criteria pertaining to store visits, purchases to departments...” However, column 8 lines 58-61 in Deaton defines a department as a segment within a store, stating that:

FIGS. 18A, B, and C are a program flow diagram for distributing

point-of-sale coupons based upon the shopping habits of the customer in various departments of the retail store. [Deaton column 8 lines 58-61.]

In contrast, the subject application defines location as the site of a store, not the location of a department within a store. Page 20 lines 25-28 state that:

This is relevant since, e.g., a consumer may exercise promotions more extensively at certain types or locations of stores more often than at others, and this can be used to increase a predictive targeting practitioner's accuracy in determining the likelihood that a particular promotion will be exercised.

Clearly, a department within a store, as disclosed by Deaton, does not disclose the definition of location as defined in the specification of the subject application and Deaton column 8 lines 58-61 does not disclose the using each individual store's information to generate a value associated with a consumer's redeemed promotions at each individual store.

Furthermore, no passage in Deaton discloses determining a usage denominator that "relates to a location where promotions are exercised by said consumer," as recited in claim 6.

For the reasons presented above, Deaton does not disclose determining a usage denominator that "relates to a location where promotions are exercised by said consumer," as recited in claim 6. Therefore, the rejection of claim 6 is improper and should be reversed.

Because claim 27 depends either directly or indirectly from claim 6, the rejection of claim 27 is also improper and should be reversed.

6. The Examiner's Rejections of Claims 7-9, 11, 13-19, 27, 32, 39, and 40 are Improper Because Deaton does not Disclose Basing Relevancy of Promotions on a Demographic Characteristic of a Consumer

a. The Rejection of Claim 7

In support of the rejection of claim 7, the examiner states that:

Regarding claims 7-19, Deaton teaches receiving identification information; determining a demographic characteristic based upon the identification information, selecting a second promotion determined to be more relevant and paring the promotions ... (see fig. 43-45, col. 63 lines 7-67 and col. 119 and col. 149 line 43 to col. 150 line 18). [Office action mailed December 13, 2004 page 5 lines 3-6.]

Column 119 in Deaton states that:

- | Step | Description |
|------|---|
| 1 | Determine if this account is to receive incentives based on shopping history criteria pertaining to store visits, purchases to departments, purchases to a product group, or purchases to a single product.
If account does not receive incentives, GOTO 8 |
| 2 | Issue incentive and record incentive in customer record. |
| 3 | Monitor and record in customer record customer's response to incentive. |
| 4 | If a preset response criteria is met
GOTO 6 |
| 5 | Preset response criteria was not met.
Incentive may be modified in response to failure to meet response criteria such as:
Varying the value of the |

incentive
Changing the conditional terms
of the incentive
Varying the product of the
incentive (i.e. Offering cash
discount versus merchandise)
No modification, retry incentive
GOTO 3.

- 6 Preset response criteria was met.
Incentive may be modified in response
to success in meeting response
criteria such as:
Reducing the incentive over
preselected period of time so as
to gradually taper off
incentives
Varying the product in order to
accomplish same as above
No modification maintain
incentive over preselected
period of time

- 7 If targeted marketing campaign is NOT
complete, GOTO 3

- 8 END OF PROCESS [Deaton column 119.]

Column 149 line 43 to column 150 line 18 in Deaton states that:

15. A method for performing targeted marketing on shopping customers
with a computer having a processor and memory, the method comprising the steps

of:

entering into the memory at a store's point-of-sale the account code of a plurality of payment instruments from a plurality of different financial institutions for use as a unique customer identification code in response to the presentation of customers' payment instruments at the point-of-sale;

entering into the memory data at the point-of-sale relating to the customer's shopping transactions, including data relating to a plurality of different products purchased by the customer;

creating a database of the store's customers' shopping transactions and account codes in response to said account codes and said data, including information regarding products frequently previously purchased by the customer relative to said plurality of different products previously purchased;

generating with the processor a first signal in response to entry of account codes of customers whose prior transactions at the store meet shopping history criteria, said first signal being contingent upon the customer meeting a future shopping criteria and said first signal being related to at least one of said products stored in said database as being frequently previously purchased by the customer relative to said plurality of different products previously purchased.

16. The method of claim 15 and further comprising:

effecting a first sales promotion to said customer in response to said first signal;

monitoring said customer's shopping transactions subsequent to said first sales promotion;

generating with the processor a second signal in dependence upon the results of said monitoring of a customer whose shopping activity fails to meet a response criteria; and

effecting a subsequent second sales promotion to said customers whose shopping activity fails to meet said predetermined response criteria, said second sales promotion being differentiated from said first sales promotion. [Deaton

column 149 line 43 to column 150 line 18.]

Column 63 lines 7-67 in Deaton states that:

Step	Description
23-25	Shopping event and dollars spent are recorded over a period of time sufficient in length to get a good representation of the store's customer base.
31	A file containing a complete list of residents in a predetermined geographic area is obtained from a third party.
32	Create an empty TARGET FILE for writing records of prospective customers not appearing in store's database.
33	Read FIRST record from the file containing a complete list of residents in a predetermined geographic area.
36	Search in the store's database for to determine if this household is present in the store's database.
38-42	If this household is not contained in the store's database, write this record said TARGET FILE of

- prospective customers not appearing in the store's database.
- 45-47 Read the NEXT record from said list of prospective customers in a predetermined geographic area. If END OF FILE marker is found then proceed to step 48, otherwise LOOP back up to step 36.
- 48 Said TARGET FILE now contains a list of prospective customers from a predetermined geographic area that were NOT contained in the store's active list of customers.
- 53 Marketing may now be targeted toward this list of non-customers, such as mailing of inducement coupons or advertising.

In summary, it may be seen that the technique of FIGS. 14A and B provide a method for retail store marketing which begins with the stored database of existing customers of the retail store which has been accumulated in the manner previously described. The database includes each customer's checking account identification number for use as a unique customer identification code, along with additional customer identification data such as home address, telephone number and the like. Each time a retail customer enters the retail store and makes a purchase, the unique customer identification code of the customer is detected by the present system. Comparison is made of each entered unique customer identification code with the stored database. A list of prospective customers of the retail store in a predetermined geographical area is obtained through conventional sources and is stored in the host processor 110. Comparison is made of the stored

database with the list of prospective customers. All data is eliminated from the list of prospective customers which relates to information contained in the stored database, such that a non-customer database is produced which contains data relating only to prospective customers who do not appear on the stored database.

The present system generates a non-customer database which would allow the mailing of advertising material in a geographic area to customers who have not previously shopped, or who have infrequently shopped at the retail store.

In response, the applicant submits that the passages and the figures that the examiner cited in Deaton do not disclose capturing or processing demographic information and therefore, cannot anticipate the limitations defined by either recitation "selecting a promotion determined to be more relevant [than the first low relevance promotion] to said consumer identified by said identification information based upon said demographic characteristic of said consumer" or the recitation of "pairing" these two promotions, recited in claim 7.

The cited passages and figures of Deaton disclose issuing incentives based on information pertaining to a consumer's identification (Deaton column 63 lines 44-48), shopping history (Deaton column 149 lines 63-65), and purchases (Deaton column 149 lines 59-62). However, information pertaining to a consumer's identification, shopping history, or purchases are not demographic characteristics. This is because demography is defined as the statistical study of human populations especially with reference to size and density, distribution, and vital statistics.⁴ Demographic is defined as "of or relating to demography."⁵

⁴Attachment 3 is a copy of the definition of "demography" as defined by the Merriam-Webster OnLine Dictionary, <http://www.m-w.com/cgi-bin/dictionary?book=Dictionary&va=demography>, viewed May 10, 2005. This evidence is not contained in the record. The applicant submits, pursuant to 37 CFR 41.33(d)(1) that this definition is necessary to clarify the examiner's rejections and to clarify applicant's response to said rejections. The applicant has filed a separate request herewith requesting that if the examiner declines to admit this evidence, that the applicant be permitted to file a supplemental appeal brief which does not rely on this piece of evidence

⁵Attachment 4 is a copy of the definition of "demographic" as defined by the Merriam-Webster OnLine Dictionary,

The applicant's claims define determining relevance of promotions based on demographic characteristics. Page 9 line 30 through page 10 line 2 of the subject application defines demographic data, stating that:

Consumer demographic table 616 can contain data regarding the demographics of the individual consumer such as, e.g., age, profession, gender, race, education level, marital status, number of children, pet ownership, and other demographic factors. [Specification page 9 line 30 through page 10 line 2.]

Thus, the common meaning of demographic and the disclosure in this application distinguishes the claimed "demographic characteristics" from Deaton's consumer's identification, shopping history, and purchases, which are what the passages in Deaton cited by the examiner disclose. Therefore, Deaton does not disclose either "selecting a promotion determined to be more relevant to said consumer identified by said identification information based upon said demographic characteristic of said consumer" or "pairing" promotions, as recited in claim 7.

For all of the foregoing reasons, the rejection of claim 7 is improper and should be reversed.

Because claims 8-19, 27, 32, and 39-40 depend either directly or indirectly from claim 7, the rejections of claims 8-19, 27, 32, and 39-40 are also improper and should be reversed.

b. Deaton does not Disclose the Additional Limitations of Dependent Claims 8, 9, 11, and 13-19

The examiner has not presented a prima facie case for the 35 USC 102(e) rejection of

<http://www.m-w.com/cgi-bin/dictionary?book=Dictionary&va=demographic>, viewed May 5, 2005. This evidence is not contained in the record. The applicant submits, pursuant to 37 CFR 41.33(d)(1) that this definition is necessary to clarify the examiner's rejections and to clarify applicant's response to said rejections. The applicant has filed a separate request herewith requesting that if the examiner declines to admit this evidence, that the applicant be permitted to file a supplemental appeal brief which does not rely on this piece of evidence

claims 8-19. The examiner has presented a rejection which only addresses the method of claim 7. See Office Action mailed December 13, 2004 page 5 lines 3-6. The examiner (or the Board, if the Board is the first body to raise a particular ground for rejection) "bears the initial burden . . . of presenting a prima facie case of unpatentability." In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). Furthermore, "a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros. v. Union Oil Co. Of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The examiner has not met the burden for showing a prima facie case of anticipation by Deaton. Each claim is discussed below.

(1.) Claim 8

The examiner does not present a prima facie case for the 35 USC 102(e) rejection of claim 8 over Deaton. The examiner has not shown that Deaton discloses the limitation defined by the recitation in claim 8 of "said demographic characteristic of said consumer [upon which relevancy is based] comprises a pet ownership by said consumer." Therefore, the rejection of claim 8 is improper and should be reversed.

Because claim 27 depends either directly or indirectly from claim 8, the rejection of claim 27 is also improper and should be reversed.

(2.) Claim 9

The examiner does not present a prima facie case for the 35 USC 102(e) rejection of claim 9 over Deaton. The examiner has not shown that Deaton discloses the limitation defined by the recitation in claim 9 of "said demographic characteristic of said consumer [upon which relevancy is based] comprises parenthood." Therefore, the rejection of claim 9 is improper and should be reversed.

Because claim 27 depends either directly or indirectly from claim 9, the rejection of claim 27 is also improper and should be reversed.

(3.) Claim 11

The examiner does not present a prima facie case for the 35 USC 102(e) rejection of claim 11 over Deaton. The examiner has not shown that Deaton discloses the limitation defined by the recitation in claim 11 of "said pairing step comprises printing said first low relevance

promotion and said second promotion on a sheet of paper.” Note this claim requires both promotions printed on a, meaning one and the same, sheet of paper. Therefore, the rejection of claim 11 is improper and should be reversed.

(4.) Claim 13

The examiner does not present a prima facie case for the 35 USC 102(e) rejection of claim 13 over Deaton. The examiner has not shown that Deaton discloses the limitation defined by the recitation in claim 13 of “said first low relevance promotion and said second promotion are for goods from a same promoter.” Therefore, the rejection of claim 13 is improper and should be reversed.

(5.) Claim 14

The examiner does not present a prima facie case for the 35 USC 102(e) rejection of claim 14 over Deaton. The examiner has not shown that Deaton discloses the limitation defined by the recitation in claim 14 of “said first low relevance promotion and said second promotion are for goods from different promoters.” Therefore, the rejection of claim 14 is improper and should be reversed.

(6.) Claim 15

The examiner does not present a prima facie case for the 35 USC 102(e) rejection of claim 15 over Deaton. The examiner has not shown that Deaton discloses the limitation defined by the recitation in claim 15 of “said first low relevance promotion is for a new product.” Therefore, the rejection of claim 15 is improper and should be reversed.

(7.) Claim 16

The examiner does not present a prima facie case for the 35 USC 102(e) rejection of claim 16 over Deaton. The examiner has not shown that Deaton discloses the limitation defined by the recitation in claim 16 of “said new product is new to a store.” Therefore, the rejection of claim 16 is improper and should be reversed.

(8.) Claim 17

The examiner does not present a prima facie case for the 35 USC 102(e) rejection of claim 17 over Deaton. The examiner has not shown that Deaton discloses the limitation defined by the recitation in claim 17 of “said new product is new to said consumer.” Therefore, the

rejection of claim 17 is improper and should be reversed.

(9.) Claim 18

The examiner does not present a prima facie case for the 35 USC 102(e) rejection of claim 18 over Deaton. The examiner has not shown that Deaton discloses the limitation defined by the recitation in claim 18 of “said new product is newly developed.” Therefore, the rejection of claim 18 is improper and should be reversed.

(10.) Claim 19

The examiner does not present a prima facie case for the 35 USC 102(e) rejection of claim 19 over Deaton. The examiner has not shown that Deaton discloses the limitation defined by the recitation in claim 19 of “selecting a third promotion determined to be more relevant to said consumer identified by said identification information; and pairing said third promotion with said first low relevance promotion and said second promotion.” Therefore, the rejection of claim 19 is improper and should be reversed.

7. The Rejections of Claims 24, 25, and 49-52 are Improper (1) for the Same Reasons the Rejection of Claim 7 is Improper and (2) Because Deaton does not Disclose Pairing Promotions Based Upon a Demographic Characteristic

In support of the rejections of claims 24 and 25, the examiner states that:

Claims 24 and 25 are rejected as stated above in claim 7. [Office action mailed December 13, 2004 page 5 line 9.]

In response, the applicant submits that claim 24 is a system claim that corresponds to method claim 7. Therefore, in accordance with the applicant’s argument in section III.G.6. above, the rejection of claim 24 is improper and should be reversed.

The examiner does not present a prima facie case for the 35 USC 102(e) rejection of claim 25 over Deaton. Deaton does not disclose the recitation in claim 25 of “a processor configured to select a second promotion having a high relevance to said consumer from said

plurality of potential second promotions based on said demographic characteristic and to pair said second promotion with said first low relevance promotion.” Therefore, the rejection of claim 25 is improper and should be reversed.

Because claims 49 and 50 depend directly from claim 24, the rejections of claims 49 and 50 are also improper and should be reversed. Because claims 51 and 52 depend directly from claim 25, the rejections of claims 51 and 52 are also improper and should be reversed. Moreover, the rejections of these claims are improper for the additional reasons stated below in section III.G.8.

8. The Rejections of Claims 35-58 are Improper Because Deaton does not Disclose Either (1) Exercising the First Low Relevance Promotion with the Second Promotion or (2) Displaying Together a First Low Relevance Promotion with a Second Promotion

In support of the rejections of claims 35-58, the examiner states that:

Regarding claims 35-58, Deaton teaches exercising the low relevance and the second promotion and displaying together both promotion (see col. Fig 32-34).
[Office action mailed December 13, 2004 page 5 lines 21-22.]

Figures 32-34 are described at Deaton column 92 line 36 through column 95 line 19, which states that:

FIG. 32 illustrates a subroutine termed coupon series for use in the subroutines shown in FIGS. 30 and 31. This subroutine provides for accessing of types of coupons determined by the previous program routines:

Step	Description
148	SUBROUTINE BUILD-COUPON-LIST. This routine is passed the COUPON-

TYPE and COUPON-LEVEL (if applicable)
and adds coupons to be spooled to a
COUPON LIST.

149 One or more coupons may be stored for
each COUPON-TYPE. COUPON-CNTR is
used to sequentially access each
coupon for COUPON-TYPE.
SET COUPON-CNTR to 0.

150 Coupons are stored as follows:
COUPON-TYPE - type of coupon
COUPON-LEVEL - level of this
particular type of coupon
COUPON-CNTR - sequential counter for
accessing coupons
NUMBER-ISSUED - counter for number of
coupons issued
NUMBER-REDEEMED - counter for number
redeemed
ECHO-FLAG - flags if this is an ECHO COUPON
ECHO-VALUE - determines value of
ECHO COUPON
HIT-CNTR - used with RANDOM COUPONS
RND-SEED - used to determine random
frequency
COUPON-DATA - text and variables used
to make the coupon
Using COUPON-TYPE, COUPON-LEVEL, and
COUPON-CNTR build a key to access the
coupon from the coupon database

151 If the ECHO-FLAG is set for this record in the coupon database, it means that an ECHO COUPON is to be added to the COUPON LIST.

An ECHO coupon is a variable coupon that is determined based on the customer's list of items that have been purchased that contained matches in the BCTT as described in 1-10 and 70-73. An Echo coupon simply attempts to provide the customer with a coupon for an item that the customer has shown a propensity to purchase. For example, a customer has recently purchased disposable diapers. Based on this information, we can determine that the way to incent this customer is with disposable diapers and/or with complements to this product such as baby wipes, baby food, etc.

If the ECHO-FLAG is set for this coupon record:

152 PERFORM ECHO-COUPONS (200-211) and RETURN AT 153.

153 Two varieties of coupons available are random coupons and installment coupons.

154 Random coupons are produced at a set

frequency as determined for each random coupon. For example, a FREE TURKEY coupon can be set to come out every 50th time that the coupon record is accessed for spooling. If, for example, this coupon is defined for Coupon "E" , then every 50th customer that qualifies as a Coupon "E" would receive a coupon for a FREE TURKEY.

If this coupon is a RANDOM COUPON:

155 Increment HIT-CNTR in coupon record.
156 If HIT-CNTR matches RND-SEED. GOTO
160.

Otherwise, GOTO 161.

157 Installment coupons are coupons whose value is determined by the amount of purchase. For example, if the store is running a promotion giving away a \$10.00 U.S. Savings Bond for every 100 BOND BUCKS redeemed, a coupon could be defined that is worth 1 BOND BUCK for every dollar spent. That is, a grocery order for \$75 would produce a coupon worth 75 BOND BUCKS.

If this coupon is an INSTALLMENT COUPON:

158 Determine coupon's value based on this purchase. GOTO 160.

- 159 None of the above.
- 160 Add this coupon to the list of
coupons to be spooled for this
transaction.
- 161 Update the coupon record with updated
information based on issuance and/or
hits (for random).
- 162 Increment COUPON-CNTR.
- 163 If another Coupon for this COUPON-
TYPE exists, loop back through to add
it to the list. GOTO 150.
- 163B RETURN TO CALLING ROUTINE

FIG. 33 illustrates a flow chart for the redemption of coupons electronically. For example, rather than printing out coupons at the printer 976, discounts may be electronically generated and developed by the CVC controller 965. For example, credits for prior purchases may be developed and stored by the CVC controller 965 and applied at subsequent point-of-sale transactions as exemplified by the flow chart of FIG. 33:

- | Step | Description |
|------|--|
| 164 | Point-of-sale incentives may be
spooled or stored electronically.
If incentives NOT previously stored
electronically, GOTO 180. |
| 165 | Electronic coupons were previously
stored and will now be redeemed.
Choose media for previous storage of
electronic coupons. |
| 166 | If coupons stored on a "SMART" Card: |
| 167 | AP/M accesses first coupon from
"SMART" card using "SMART" card |

read/write device.

168 If no more coupons, GOTO 180.

169 AP/M sends coupon to CVC controller.

170 CVC controller checks coupon against
items purchased.

 If item was purchased:

171 Coupon information is sent to ECR
Controller.

172 ECR Controller credits customer's
purchase amount for value of coupon.

173 CVC Controller updates coupon
database to reflect redemption.

174 AP/M access next coupon from "SMART"
card. GOTO 168.

175 If coupons stored on mass storage
device in CVC controller:

176 CVC Controller accesses first coupon
from storage.

177 If no more coupons, GOTO 180.

178 CVC Controller checks coupon against
items purchased.

 If item was purchased:

 EXECUTE steps 171-173, THEN PROCEED
WITH 179.

179 Read next coupon from CVC
Controller's mass storage. GOTO 177.

FIG. 34 is a flow chart of the disbursement of point-of-sale incentives either by the printing out of a coupon or by storage of electronic funds on a smart card or by a mass storage device at the controller 965:

Step	Description
180	A coupon list was built as described in steps 122-163B and will now be spooled. Access first coupon from the coupon list.
181	If end of coupon list, GOTO 193.
182	Choose medium for dispensing coupons.
183	If spooling medium is POS printer:
184	CVC Controller sends coupon to AP/M
185	AP/M sends coupon to printer. GOTO 192.
186	If spooling medium is electronic coupon on a "SMART" card:
187	Controller encrypts the coupon identification data. Encryption will prevent fraudulent coupons from being written to the card. This method optionally allows customer with "SMART" card to redeem coupons at any store from within a network.
188	Controller sends encrypted data to AP/M.
189	AP/M writes coupon to "SMART" card with read/write device. Coupon description is sent to ECR for display on purchase receipt tape. GOTO 192.
190	If spooling medium is electronic

coupon on CVC controller's mass
storage device:

- 191 CVC Controller writes coupon to an
electronic coupon file with a primary
key based on account number. Coupon
description is sent to ECR for
display on purchase receipt tape.
- 192 Access next coupon from the coupon
list. GOTO 181.
- 193 END [Deaton column 92 line 36 through column 95 line 19.]

Figure 35 (which is referred to by figure 32) discloses a sequence for issuing coupons at
column 96 lines 10-23 of Deaton, which states that:

- 204 Assign item a priority.
- 205 Add item to ECHO COUPON LIST.
- 206 Access next item from account's ITEM
LIST. GOTO 203
- 207 Access highest priority item from
ECHO COUPON LIST.
- 208 If end of ECHO COUPON LIST, no more
echo coupons left. GOTO 211.
- 209 This item will be passed back to the
calling routine. Place item's UPC
code in the parameter space for
passing values back to the calling
routine.
- 210 Remove item from ECHO COUPON LIST so
it will not be available for choosing
the next time through.
- 211 RETURN TO CALLING PROGRAM.

In response, the applicant submits that the passage and the figures that the examiner cites in Deaton do not anticipate the limitations defined by the recitation “said pairing comprises requiring exercising said first low relevance promotion with said second promotion,” as recited in claims 35, 37, 39, 41, 43, 45, 47, 49, 51, 53, 55, and 57. The applicant also submits that the passage and the figures that the examiner cites in Deaton do not anticipate the limitations defined by the recitation “said pairing comprises displaying together said first low relevance promotion with said second promotion,” as recited in claims 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, and 58.

Deaton’s figure 32 illustrates a subroutine for accessing types of coupons determined by figures 30 and 31. See Deaton column 92 lines 36-37. Figure 32 also illustrates random coupons, which Deaton defines at column 93 lines 30-32 as coupons “produced at a set frequency as determined for each random coupon”; and installment coupons, which Deaton defines at column 93 lines 42-44 as “coupons whose value is determined by the amount of a purchase.” Deaton also defines installment coupons at column 76 lines 18-23 as coupons “such that the customer does not get the ultimate prize but points toward a prize.” Figure 32 also illustrates an Echo coupon, which Deaton defines at column 93 lines 15-18 as coupons which “attempts to provide the customer with a coupon for an item that the customer has shown a propensity to purchase. These passages do not disclose exercising together or displaying together a high relevance promotion and a low relevance promotion, as defined in the subject claims.

Exercising is defined to mean fulfilling the requirements of the promotion necessary to receive the reward associated with the promotion. See the definition at page 4 lines 23-24.

Displaying is defined in the specification. See figure 10 and page 28 lines 3-6, which gives an example of a “display” as a cathode ray tube, stating that:

Computer system 801 may be coupled via bus 802 to a display 810, such as a cathode ray tube (CRT), for displaying information to a computer user.

Display 810 can form a promotion and/or address output device 634 or 644 of FIGS. 1 and 2, especially when the vendor site is an individual’s home computer and the paired promotions are advertisements. [Specification page 28 lines 3-6.]

Moreover, the summary of the invention section at page 4 lines 25-29 lists printing and displaying as distinct species of pairing, thereby expressly defining “displaying” as excluding printing.

In the passages cited in Deaton by the examiner, neither random, installment, nor Echo coupons are displayed on a computer screen, they are simply printed at checkout and given to a consumer. Therefore, figure 32 does not disclose: (1) exercising the first low relevance promotion with the second promotion or (2) displaying together a first low relevance promotion with a second promotion, as defined by the claims.

Figure 33 in Deaton illustrates a flowchart for the redemption of coupons electronically. However, it does not disclose a requirement that promotions determined to be high relevance and low relevance must be exercised together for the customer to obtain their rewards.

Figure 34 in Deaton illustrates a flowchart of the disbursement of point-of-sale incentives either by printing a coupon or by storing electronic funds on a smart card or by a mass storage device at the controller. However, figure 34 does not disclose a requirement that the promotions determined to be high relevance and low relevance must be displayed together.

In summary, figures 32-34 do not disclose “said pairing comprises requiring exercising said first low relevance promotion with said second promotion,” as recited in claims 35, 37, 39, 41, 43, 45, 47, 49, 51, 53, 55, and 57. Moreover, figures 32-34 do not disclose (or teach) “said pairing comprises displaying together said first low relevance promotion with said second promotion,” as recited in claims 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, and 58.

Since Deaton does not disclose “said pairing comprises requiring exercising said first low relevance promotion with said second promotion,” as recited in claims 35, 37, 39, 41, 43, 45, 47, 49, 51, 53, 55, and 57, the rejections of claims 35, 37, 39, 41, 43, 45, 47, 49, 51, 53, 55, and 57 are improper and should be reversed. Moreover, since Deaton does not disclose “said pairing comprises displaying together said first low relevance promotion with said second promotion,” as recited in claims 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, and 58, the rejections of claims 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, and 58 are improper and should be reversed.

H. 37 CFR 41.37 (c)(1)(viii) Claims Appendix

Appendix I is attached which contains a copy of the claims involved in the appeal.

I. 37 CFR 41.37 (c)(1)(ix) Evidence Appendix

Attachment 1 is a copy of Ex parte Bowman, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001), 2001 Pat App. Lexis 46 (BPAI June 12, 2001). This evidence was filed by the applicant on September 28, 2004 in a reply to a non-final office action.

Attachment 2 is a copy of the definition of "denominator" as defined by the Merriam-Webster OnLine Dictionary,
<http://www.m-w.com/cgi-bin/dictionary?book=Dictionary&va=denominator>, viewed May 5, 2005.

Attachment 3 is a copy of the definition of "demography" as defined by the Merriam-Webster OnLine Dictionary,
<http://www.m-w.com/cgi-bin/dictionary?book=Dictionary&va=demography>, viewed May 10, 2005.

Attachment 4 is a copy of the definition of "demographic" as defined by the Merriam-Webster OnLine Dictionary,
<http://www.m-w.com/cgi-bin/dictionary?book=Dictionary&va=demographic>, viewed May 5, 2005.

J. 37 CFR 41.37 (c)(1)(x) Related Proceedings Appendix

In related application serial no. 09/776,714, attorney docket number PIP-69A-KATZ, the applicant filed an appeal April 7, 2005. This appeal has not been docketed at the BPAI.

The appeal brief was in response to a final office action mailed January 7, 2005.

IV. 37 CFR 41.37 (c)(2)

This brief does not include any new or non-admitted amendment. This brief contains new evidence in the form of exhibits 2-4, as the exhibits are not contained in the record. The applicant submits, pursuant to 37 CFR 41.33(d)(1) that these definitions are necessary to clarify

the examiner's rejections and to clarify applicant's response to said rejections. The applicant has filed a separate request herewith requesting that if the examiner declines to admit this evidence, that the applicant be permitted to file a supplemental appeal brief which does not rely on the non-admitted items of evidence.

V. **37 CFR 41.37 (d)**

This appeal brief complies with all the requirements of paragraph (c) of this section.

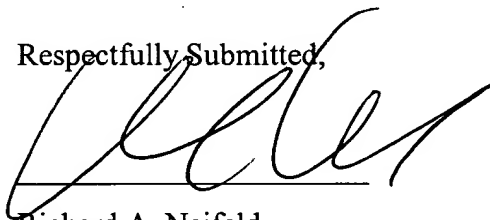
VI. **37 CFR 41.37 (e)**

The applicant herewith timely files the appeal brief.

5/10/2005

DATE

Respectfully Submitted,



Richard A. Neifeld

Attorney of Record

Registration No. 35,299

BTM/NAC/BTM/LK/BTM

Printed: May 10, 2005 (8:15pm)

Y:\Clients\Catalina\PIP-69B-KATZ\PIP-69B-KATZ\Drafts\AppealBrief_050509.wpd

Appendix I

1. A computer-implemented method for increasing the likelihood that a first low relevance promotion will be exercised by a consumer, comprising:
 - receiving identification information from said consumer;
 - determining a category purchase history of said consumer using said received identification information;
 - selecting a second promotion determined to be more relevant to said consumer identified by said identification information based upon said category purchase history of said consumer;
 - and
 - pairing said first low relevance promotion with said second promotion.
2. The computer-implemented method according to claim 1, wherein said category purchase history comprises a frequency of purchases in a product category.
3. The computer-implemented method according to claim 1, wherein said category purchase history comprises a number of purchases in a product category.
4. A computer-implemented method for increasing the likelihood that a first low relevance promotion will be exercised by a consumer, comprising:
 - receiving identification information from said consumer;
 - determining a promotion usage denominator of said consumer using said received identification information;
 - selecting a second promotion determined to be more relevant to said consumer identified by said identification information based upon said promotion usage denominator of said consumer; and
 - pairing said first low relevance promotion with said second promotion.
5. The computer-implemented method according to claim 4, wherein said promotion usage denominator relates to a value of promotions exercised by said consumer.

6. The computer-implemented method according to claim 4, wherein said promotion usage denominator relates to a location where promotions are exercised by said consumer.

7. A computer-implemented method for increasing the likelihood that a first low relevance promotion will be exercised by a consumer, comprising:

receiving identification information from said consumer;

determining a demographic characteristic of said consumer using said received identification information;

selecting a second promotion determined to be more relevant to said consumer identified by said identification information based upon said demographic characteristic of said consumer; and

pairing said first low relevance promotion with said second promotion.

8. The computer-implemented method according to claim 7, wherein said demographic characteristic of said consumer comprises a pet ownership by said consumer.

9. The computer-implemented method according to claim 7, wherein said demographic characteristic of said consumer comprises parenthood.

10. The computer-implemented method according to any one of claims 1, 4, or 7, further comprising providing said paired first low relevance promotion and second promotion to said consumer.

11. The computer-implemented method according to any one of claims 1, 4, or 7, wherein said pairing step comprises printing said first low relevance promotion and said second promotion on a sheet of paper.

12. The computer-implemented method according to any one of claims 1, 4, or 7, wherein said first low relevance promotion and said second promotion are in a packaged goods

industry.

13. The computer-implemented method according to any one of claims 1, 4, or 7, wherein said first low relevance promotion and said second promotion are for goods from a same promoter.

14. The computer-implemented method according to any one of claims 1, 4, or 7, wherein said first low relevance promotion and said second promotion are for goods from different promoters.

15. The computer-implemented method according to any one of claims 1, 4, or 7, wherein said first low relevance promotion is for a new product.

16. The computer-implemented method according to any one of claims 1, 4, or 7, wherein said new product is new to a store.

17. The computer-implemented method according to any one of claims 1, 4, or 7, wherein said new product is new to said consumer.

18. The computer-implemented method according to any one of claims 1, 4, or 7, wherein said new product is newly developed.

19. The computer-implemented method according to any one of claims 1, 4, or 7, further comprising:

selecting a third promotion determined to be more relevant to said consumer identified by said identification information; and

pairing said third promotion with said first low relevance promotion and said second promotion.

20. A system for increasing the likelihood that a first low relevance promotion will be exercised by a consumer, comprising:

- means for receiving identification information from said consumer;
- means for determining a category purchase history of said consumer using said identification information received from said means for receiving;
- means for selecting a second promotion determined to be more relevant to said consumer identified by said identification information based upon said category purchase history of said consumer; and
- means for pairing said first low relevance promotion with said second promotion.

21. A system for increasing the likelihood that a first low relevance promotion will be exercised by a consumer, comprising:

- an identification input device configured to receive identification information from said consumer;
- a category purchase history database including a category purchase history of said consumer, said category purchase history queried by said received identification information;
- a potential second promotion database including a plurality of potential second promotions; and
- a processor configured to select a second promotion having a high relevance to said consumer from said plurality of potential second promotions based on said category purchase history and to pair said second promotion with said first low relevance promotion.

22. A system for increasing the likelihood that a first low relevance promotion will be exercised by a consumer, comprising:

- means for receiving identification information from said consumer;
- means for determining a promotion usage denominator of said consumer using said identification information received by said means for receiving;
- means for selecting a second promotion determined to be more relevant to said consumer identified by said identification information based upon said promotion usage denominator of

said consumer; and

means for pairing said first low relevance promotion with said second promotion.

23. A system for increasing the likelihood that a first low relevance promotion will be exercised by a consumer, comprising:

an identification input device configured to receive identification information from said consumer;

a promotion usage database including a promotion usage denominator of said consumer, said promotion usage denominator queried by said received identification information;

a potential second promotion database including a plurality of potential second promotions; and

a processor configured to select a second promotion having a high relevance to said consumer from said plurality of potential second promotions based on said promotion usage denominator and to pair said second promotion with said first low relevance promotion.

24. A system for increasing the likelihood that a first low relevance promotion will be exercised by a consumer, comprising:

means for receiving identification information from said consumer;

means for determining a demographic characteristic of said consumer using said identification information received by said means for receiving;

means for selecting a second promotion determined to be more relevant to said consumer identified by said identification information based upon said demographic characteristic of said consumer; and

means for pairing said first low relevance promotion with said second promotion.

25. A system for increasing the likelihood that a first low relevance promotion will be exercised by a consumer, comprising:

an identification input device configured to receive identification information from said consumer;

a demographic database including a demographic characteristic of said consumer, said demographic characteristic queried by said received identification information;

a potential second promotion database including a plurality of potential second promotions; and

a processor configured to select a second promotion having a high relevance to said consumer from said plurality of potential second promotions based on said demographic characteristic and to pair said second promotion with said first low relevance promotion.

26. A computer-implemented method for increasing the likelihood that a first low relevance promotion will be exercised, comprising:

receiving promotion information regarding said first low relevance promotion and a second promotion;

pairing said first low relevance promotion with said second promotion;

identifying a consumer likely to exercise said second promotion;

providing said consumer with said paired first low relevance promotion and second promotion.

27. A computer readable medium containing program instructions for execution on a computer system, which when executed by the computer system, cause the computer system to perform the method recited in any one of claims 1 to 9 and 26.

28. A computer-implemented method comprising:

selecting a first promotion determined to be more relevant to a consumer based on purchase history data;

determining a second promotion determined to be less relevant to said consumer based upon said purchase history data;

pairing said first promotion with said second promotion; and

providing the paired promotions to said consumer.

29. A system for selecting a first promotion determined to be more relevant to a consumer based on purchase history data, a second promotion determined to be less relevant to said consumer based upon said purchase history data, and pairing the first and second promotions, comprising:

a computer system;

a database storing said purchase history data such that said purchase history data is accessible by said computer system;

code implemented on said computer system for determining said first promotion, and said second promotion, and for pairing said first promotion with said second promotion; and
structure for outputting data indicating the paired promotions.

30. The method of claim 1 wherein said determining and said selecting are computer implemented.

31. The method of claim 4 wherein said determining and said selecting are computer implemented.

32. The method of claim 7 wherein said determining and said selecting are computer implemented.

33. The method of claim 26 wherein said pairing and said identifying are computer implemented.

34. The method of claim 28 wherein said selecting, said determining, and said pairing are computer implemented.

35. The method of claim 1 wherein said pairing comprises requiring exercising said first low relevance promotion with said second promotion.

36. The method of claim 1 wherein said paring comprises displaying together said first low relevance promotion with said second promotion.
37. The method of claim 4 wherein said pairing comprises requiring exercising said first low relevance promotion with said second promotion.
38. The method of claim 4 wherein said paring comprises displaying together said first low relevance promotion with said second promotion.
39. The method of claim 7 wherein said pairing comprises requiring exercising said first low relevance promotion with said second promotion.
40. The method of claim 7 wherein said paring comprises displaying together said first low relevance promotion with said second promotion.
41. The system of claim 20 wherein said pairing comprises requiring exercising said first low relevance promotion with said second promotion.
42. The system of claim 20 wherein said paring comprises displaying together said first low relevance promotion with said second promotion.
43. The system of claim 21 wherein said pairing comprises requiring exercising said first low relevance promotion with said second promotion.
44. The system of claim 21 wherein said paring comprises displaying together said first low relevance promotion with said second promotion.
45. The system of claim 22 wherein said pairing comprises requiring exercising said first low relevance promotion with said second promotion.

46. The system of claim 22 wherein said pairing comprises displaying together said first low relevance promotion with said second promotion.

47. The system of claim 23 wherein said pairing comprises requiring exercising said first low relevance promotion with said second promotion.

48. The system of claim 23 wherein said pairing comprises displaying together said first low relevance promotion with said second promotion.

49. The system of claim 24 wherein said pairing comprises requiring exercising said first low relevance promotion with said second promotion.

50. The system of claim 24 wherein said pairing comprises displaying together said first low relevance promotion with said second promotion.

51. The system of claim 25 wherein said pairing comprises requiring exercising said first low relevance promotion with said second promotion.

52. The system of claim 25 wherein said pairing comprises displaying together said first low relevance promotion with said second promotion.

53. The method of claim 26 wherein said pairing comprises requiring exercising said first low relevance promotion with said second promotion.

54. The method of claim 26 wherein said pairing comprises displaying together said first low relevance promotion with said second promotion.

55. The method of claim 28 wherein said pairing comprises requiring exercising said first low relevance promotion with said second promotion.

56. The method of claim 28 wherein said paring comprises displaying together said first low relevance promotion with said second promotion.

57. The system of claim 29 wherein said pairing comprises requiring exercising said first low relevance promotion with said second promotion.

58. The system of claim 29 wherein said paring comprises displaying together said first low relevance promotion with said second promotion.

Attachment 1

LEXSEE 2001 PAT APP. LEXIS 46

Ex parte CLEMENT W. BOWMAN

Appeal No. 1999-0583

Application 08/418,152

Board of Patent Appeals and Interferences

2001 Pat. App. LEXIS 46

June 12, 2001, Decided

[*1]

Before JERRY SMITH, DIXON, and BLANKENSHIP, Administrative Patent Judges.

OPINIONBY: SMITH

OPINION:

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

ON BRIEF

JERRY SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134 from the examiner's rejection of claims 1-18, which constitute all the claims in the application. An amendment after final rejection was filed on November 24, 1997, but was denied entry by the examiner.

The disclosed invention pertains to a method of evaluating an intangible asset of interest.

Representative claim 1 is reproduced as follows:

1. A method of evaluating an intangible asset of interest, comprising the steps of:

establishing first and second variables related to the value of said intangible asset of interest;

establishing a series of performance criteria statements probative of the value of said first and second variables;

scoring each of said performance criteria statements;

summing scores to generate first and second total scores based upon the extent to which individual statements [*2] accurately describe said intangible asset of interest;

transforming physical media into a chart having a first axis relating to said first variable and a second axis relating to said second variable;

physically plotting a point on said chart, said point being located at coordinates corresponding to said first and second total scores, respectively, and,

using said chart in making at least one decision regarding the value of said intangible asset of interest.

The examiner relies on the following reference:

Robert R. Blake et al. (Blake), *The Managerial Grid*, Gulf Publishing Company, 1994, page 10.

Claims 1-18 stand rejected under 35 U.S.C. § 101 as being directed to nonstatutory subject matter. Claims 1-18 also stand rejected under 35 U.S.C. § 112, first paragraph, as being based on an inadequate disclosure. Finally, claims 1-18 stand rejected under 35 U.S.C. § 103 as being unpatentable over the teachings of Blake.

Rather than repeat the arguments of appellant or the examiner, we make reference to the brief and the answer for the respective details thereof.

OPINION [*3]

We have carefully considered the subject matter on appeal, the rejections advanced by the examiner and the evidence of obviousness relied upon by the examiner as support for the prior art rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellant's arguments set forth in the brief along with the examiner's rationale in support of the rejections and arguments in rebuttal set forth in the examiner's answer.

It is our view, after consideration of the record before us, that claims 1-18 are not directed to statutory subject matter. We are also of the view that the disclosure adequately supports the invention of claims 1-18. Finally, it is our view that the evidence relied upon and the level of skill in the particular art would have suggested to one of ordinary skill in the art the obviousness of the invention as set forth in claims 1-18. Accordingly, we affirm.

Appellant has indicated that for purposes of this appeal the claims will all stand or fall together as a single group [brief, page 3]. Consistent with this indication appellant has made no separate arguments with respect to any of the claims on appeal. Accordingly, all the claims [*4] before us will stand or fall together. Note *In re King*, 801 F.2d 1324, 1325, 231 USPQ 136, 137 (Fed. Cir. 1986); *In re Sernaker*, 702 F.2d 989, 991, 217 USPQ 1, 3 (Fed. Cir. 1983). Therefore, we will consider the rejection against independent claim 1 as representative of all the claims on appeal. Only those arguments actually made by appellant have been considered in this decision. Arguments which appellant could have made but chose not to make in the brief have not been considered [see 37 CFR § 1.192(a)].

With respect to the rejection under 35 U.S.C. § 101, the examiner asserts that the claimed invention does not fall within the technological arts because no form of technology is disclosed or claimed [answer, page 3]. Appellant responds by analyzing the claimed invention under "The Examination Guidelines for Computer-Related Inventions" as published by the United States Patent and Trademark Office. Based on these guidelines, appellant argues that the recited method of creating a chart and plotting a point thereon is "physical and has clear real world value" [*5] [brief, page 4]. Appellant also argues that the claimed process clearly results in a physical transformation outside of a computer for which a practical application in the technological arts is either disclosed in the specification or would have been known to a skilled artisan [id., page 6]. The examiner responds that the noted guidelines are inapplicable here because appellant has not recited the use of a computer in either the specification or the claims. The examiner finds that neither the specification nor the claims discuss the use of any technology with respect to the claimed invention [answer, pages 5-6].

We agree with the examiner. Appellant has carefully avoided tying the disclosed and claimed invention to any technological art or environment. As noted by the examiner, the disclosed and claimed invention is directed to nothing more than a human making mental computations and manually plotting the results on a paper chart [answer, page 5]. The Examination Guidelines for Computer-Related Inventions are not dispositive of this case because there is absolutely no indication on this record that the invention is connected to a computer in any manner.

Despite the express language [*6] of 35 U.S.C. § 101, several judicially created exceptions have been excluded from subject matter covered by Section 101. These exceptions include laws of nature, natural phenomena, and abstract ideas. See *Diamond v. Diehr*, 450 U.S. 175, 185, 209 USPQ 1, 7 (1981). We interpret the examiner's rejection as finding that the claimed invention before us is nothing more than an abstract idea because it is not tied to any technological art or environment. Appellant's argument is that the physical (even manual) creation of a chart and the plotting of a point on this chart places the invention within the technological arts.

The phrase "technological arts" has been created to offer another view of the term "useful arts." The Constitution of the United States authorizes and empowers the government to issue patents only for inventions which promote the progress [of science and] the useful arts. We find that the invention before us, as disclosed and claimed, does not promote the progress of science and the useful arts, and does not fall within the definition of technological arts. The abstract idea which forms [*7] the heart of the invention before us does not become a technological art merely by the

recitation in the claim of "transforming physical media into a chart" [sic, drawing or creating a chart] and "physically plotting a point on said chart."

In summary, we find that the invention before us is nothing more than an abstract idea which is not tied to any technological art, environment, or machine, and is not a useful art as contemplated by the Constitution of the United States. The physical aspects of claim 1, which are disclosed to be nothing more than a human manually drawing a chart and plotting points on this chart, do not automatically bring the claimed invention within the technological arts. For all the reasons just discussed, we sustain the examiner's rejection of the appealed claims under 35 U.S.C. § 101.

With respect to the rejection under 35 U.S.C. § 112, the examiner asserts that the claimed invention is not described in the specification in such a way as to enable one skilled in the art to make and/or use the invention. Specifically, the examiner argues that the transforming step of claim 1 is not disclosed [*8] in the specification. According to the examiner, the chart of Figure 3 remains unchanged and is not physically transformed into the chart of Figure 4 [answer, page 4]. Appellant responds that Figure 4 of the application and its corresponding description in the specification support this step [brief, page 8, incorporating argument from amendment after final rejection].

We agree with appellant. Although the record does not reflect exactly what is meant by the step of "transforming physical media into a chart," we are of the view that the examiner's interpretation of transforming the chart of Figure 3 into the chart of Figure 4 is not what this step was intended to cover. We find the claimed step to mean nothing more than transforming physical media (blank paper) into a chart having two axes drawn thereon. Under this interpretation of claim 1, we find that the disclosure of this application supports the claimed invention as required by the first paragraph of 35 U.S.C. § 112. Specifically, the person skilled in this art would be able to make and use the claimed invention based on appellant's disclosure. Therefore, we do not sustain this rejection of [*9] the appealed claims.

With respect to the rejection under 35 U.S.C. § 103, the examiner finds that the chart on page 10 of Blake clearly suggests that scores are established for each criteria statement, and the examiner finds that summing scores to obtain a final score would have been obvious within the meaning of 35 U.S.C. § 103 [answer, pages 4-5]. Appellant argues that the summing of a plurality of scores to generate the first and second total scores which are plotted is not taught or suggested by the applied prior art [brief, page 5, incorporating argument from amendment after final rejection]. Appellant has also offered to further amend the claims, but that issue is not properly before us.

We agree with the examiner. Blake clearly teaches the step of establishing variables related to the value of the asset of interest (concern for production and concern for people). The chart shown on page 10 of Blake represents a transformed physical medium with points physically plotted thereon [(1,1), (9,1), (5,5), (1,9) and (9,9)]. Blake does not explicitly teach the steps of establishing performance criteria statements, [*10] scoring the criteria statements, and summing scores to obtain a total score.

We agree with the examiner that these three steps would have been suggested to the artisan by the chart shown in Blake. The chart in Blake has increasing numbers running along the two axes which suggests that the points to be plotted have quantity. The chart shows several specific points plotted which suggests that the various points on the chart are quantifiable. In order to quantify these points in Blake, the artisan would have recognized that (all) the factors which contribute to the value of the two variables must be identified and quantified, and the presence of these factors in the (intangible) asset under evaluation would have to be detected and summed based on the relative quantifications assigned to each factor. Thus, even though Blake does not specifically disclose that the establishing, scoring and summing steps of claim 1 are to be carried out, the artisan would have recognized the obviousness of performing these steps in order to determine where points should be plotted on the chart in Blake. Therefore, we sustain the examiner's rejection of the appealed claims under 35 U.S.C. § 103. [*11]

In conclusion, we have sustained the examiner's rejections of the appealed claims under 35 U.S.C. §§ 101 and 103, but we have not sustained the examiner's rejection under 35 U.S.C. § 112. Therefore, the decision of the examiner rejecting claims 1-18 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

CONCURBY: DIXON

CONCUR:

Dixon, Administrative Patent Judge, Concurrence.

I concur with the decision of the majority, but would add the following with respect to the discussion of the rejection under 35 U.S.C. § 101.

The claims fail to recite subject matter within any of the four statutory classes defined by § 101, which authorizes the grant of a patent to "whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof . . ." 35 U.S.C. § 101 (1994). Pursuant to its authorization under art. I, § 8, cl. 8, of the United States Constitution to promote the progress of science and useful arts, [*12] Congress has specified the types of subject matter that may be patented in § 101. Patentable subject matter must fall within one of these statutory categories.

Further, I would add that the instant claim 1 has similarity to the format of the invention as recited in claim 1 of *In re Warmerdam*, 33 F.3d 1354, 1357, 31 USPQ2d 1754, 1756 (Fed. Cir. 1994).

1. A method for generating a data structure which represents the shape of [sic] physical object in a position and/or motion control machine as a hierarchy of bubbles, comprising the steps of:

- first locating the medial axis of the object and
- then creating a hierarchy of bubbles on the medial axis.

But, I note that in *Warmerdam* both a method and apparatus were disclosed in the specification and the present claim 1 was originally filed as "creating" the chart and plotting of a point thereon.

In the Court's decision in *In re Warmerdam*, 33 F.3d at 1358, 31 USPQ2d at 1757 Judge Plager wrote:

despite the oft-quoted statement in the legislative history of the 1952 Patent Act that Congress intended that statutory subject matter "include anything [*13] under the sun that is made by man," S. Rep. No. 1979, 82d Cong., 2d Sess., 5 (1952), reprinted in 1952 U.S.C.C.A.N. 2394, 2399; H.R. Rep. No. 1923, 82d Cong., 2d Sess., 6 (1952), Congress did not so mandate. Congress included in patentable subject matter only those things that qualify as "any . . . process, machine, manufacture, or composition of matter, or any . . . improvement thereof. . ." 35 U.S.C. Section 101 (1988). Cf. *In re Alappat*, No. 92-1381, slip op. at 29 [31 USPQ2d 1545] (Fed. Cir. July 29, 1994) (en banc) ("The use of the expansive term "any" in Section 101 represents Congress's intent not to place any restrictions on the subject matter for which a patent may be obtained beyond those specifically recited in Section 101 and the other parts of Title 35.") (Emphasis added.)

Here, the Court reinforces that it is the role of Congress to set forth the boundaries of statutory subject matter and not the courts. If Congress intended for "anything under the sun that is made by man" to be patentable/statutory subject matter, then Congress would have included copyrightable materials (e.g., musical/literary [*14] works, maps and charts), into the realm of patentable subject matter. It is clear that Congress did not intend to include everything, so we must assume that there is still some limitation(s) to the spectrum of statutory subject matter under 35 U.S.C. § 101.

But in a subsequent case, *AT & T Corp. v. Excel Communications Inc.*, 172 F.3d 1352, 1355, 50 USPQ2d 1447, 1449-50 (Fed. Cir. 1999), Judge Plager wrote that

The Supreme Court has construed § 101 broadly, noting that Congress intended statutory subject matter to "include anything under the sun that is made by man." See *Diamond v. Chakrabarty*, 447 U.S. 303, 309 [206 USPQ 193] (1980) (quoting S. Rep. No. 82-1979, at 5 (1952); H.R. Rep. No. 82-1923, at 6 (1952)); see also *Diamond v. Diehr*, 450 U.S. 175, 182 [209 USPQ 1] (1981). Despite this seemingly limitless expanse, the Court has specifically identified three categories of unpatentable subject matter: "laws of nature, natural phenomena, and abstract ideas." See *Diehr*, 450 U.S. at 185. [*15] (Emphasis added.)

In *AT & T*, we see a slight variation from the position in *Warmerdam*, but still a recognition that not everything is statutory subject matter. With this recognition that abstract ideas which have not been applied in some manner (to something tangible; within the technological arts; with a computer; in a memory device or medium) to realize a "useful, concrete, and tangible result" (citing *State Street Bank & Trust Co. v. Signature Fin. Group, Inc.*, 149 F.3d 1368,

1374-75, 47 USPQ2d 1596, 1602 (Fed. Cir. 1998)), the Court in AT & T found that the claimed process, which the district court "recognized that the claims require the use of switches and computers" (AT & T 50 USPQ2d at 1449), was directed to statutory subject matter. The Court went on to find that it does not matter whether the claimed invention is directed to a process or machine and that the scope of 35 U.S.C. § 101 is the same for either claimed invention (since both were disclosed). (AT & T 50 USPQ2d at 1451.)

Here, I [*16] find that the prior factual situations may be distinguished with the present disclosed and claimed invention. In the present application, the specification is silent as to the need for any apparatus to carry out the claimed process or to make the ultimate decision regarding the value of the intangible asset. I note that the only remnant of structure to evidence the application of the abstract idea may be gleaned impliedly from originally filed claim 1 which stated "generating first and second total scores . . ." which was amended to recite "summing scores to generate first and second total scores . . ." Appellant argued in the amendment (paper no. 8) filed March 27, 1997 at page 3 that there is "post-solution activity" and "pre-solution activity," but appellant does not overtly state or argue that the disclosed or claimed invention is computer implemented or in any way involved with some application of the abstract idea beyond the creation of a chart on a physical medium and plotting of a point thereon. This I find to be no more than a mere recordation of an idea in the abstract which I would equate to the affixation in a tangible medium of that idea which has been devised separate [*17] and distinct from any real world application until the chart is created and a point plotted thereon. This to me is outside the province of 35 U.S.C. § 101.

Going back to the analysis by the Court in *In re Warmerdam*, 33 F.3d at 1360, 31 USPQ2d at 1759, the Court further states that

it is true, particularly with ideas expressed in mathematical form, that if a claim requires more than the manipulation of ideas so that the process described in the claim produces something quite different, then the process might indeed describe statutory subject matter . . . It is the claims which define the metes and bounds of the invention entitled to the protection of the patent system. *Zenith Lab. Inc. v. Bristol-Myers Squibb Co.*, 19 F.3d 1418, 1424, 30 USPQ2d 1285, 1290 (Fed. Cir. 1994).

Here, appellant argues that the claimed "transforming physical medium," which is not disclosed, but assumed to be paper, "into a chart" and "physically plotting a point on said chart" is a physical transformation. I note that the specification as originally filed is silent as to any [*18] "media" beyond being a graphical representation which may be as broad as using a stick in the sand or dirt; pen on a whiteboard or pen/pencil on paper. Appellant cites to the discussion in *State Street Bank* at page 1538 (brief at page 7) concerning *In re Alappat*, 33 F.3d 1526, 31 USPQ2d 1545 (Fed. Cir. 1994) and *Arrhythmia Research Tech. Inc. v. Corazonix Corp.*, 958 F.2d 1053, 1060, 22 USPQ2d 1033, 1039 (Fed. Cir. 1992) wherein there was a physical transformation using the result of the computation. I would distinguish those three cases (*State Street Bank*, *Alappat* and *Arrhythmia*) along with AT & T since each of the cases included a disclosed invention which was well grounded in an area of the technological arts (computer, electrical, chemical, biological, mechanical engineering and physics-the physical sciences rather than the social sciences).

Here, I find no such application, involvement, use or advancement of the technological arts in the invention as recited in express language of claim 1 or in the disclosed invention with which to interpret the language of claim 1. While [*19] I realize that a computer may arguably not be required to be disclosed *In re Dossel*, 115 F.3d 942, 946-47, 42 USPQ2d 1881, 1885 (Fed. Cir. 1997) (finding the inferred disclosure of a computer without any express disclosure), appellant has not argued the use of any item or computer with which to practice or apply the claimed process beyond the abstraction of the human mind. Appellant relies solely upon the creation/transformation of the media into a chart and plotting of a point.

While AT & T recognizes that a transformation is not a requirement for statutory subject matter and is merely one example of an indica to show the presence of statutory subject matter, the Court stated that "the finding that the claimed process 'transformed' data from one 'form' to another simply confirmed that Arrhythmia's method claims satisfied Section 101 because the mathematical algorithm included within the process was applied to produce a number which had specific meaning--a useful, concrete, tangible result--not a mathematical abstraction." (Citation omitted.) AT & T at 1452. Here, the result of the abstract idea does not, in my view, have "specific [*20] meaning" as in *Arrhythmia*, rather is still an abstraction, now recorded as in *In re Schrader*, 22 F.3d 290, 294, 30 USPQ2d 1455, 1458. (See cf. AT & T at 1453 (with respect to the lack of helpfulness in determination of a "useful, concrete, tangible result.")) While AT & T clarifies that structure need not be present in the claim language for process claims to be directed to statutory subject matter, the Court appears to impliedly weigh that the process is carried out by a network of computers and telephone switches being used in the flow of communications, but here we do not have a similar factual situation.

The Court in AT & T stated that "the Alappat inquiry simply requires an examination of the contested claims to see if the claimed subject matter as a whole is a disembodied mathematical concept representing nothing more than a 'law of nature' or an 'abstract idea,' or if the mathematical concept has been reduced to some practical application rendering it 'useful.'" AT & T at 1544 (citing *In re Alappat*, 33 F.3d at 1581, 31 USPQ2d at 1557).

In AT & T at 1450, the Court [*21] stated that: "this court recently pointed out that any step-by-step process, be it electronic, chemical, or mechanical, involves an 'algorithm' in the broad sense of the term. See *State Street Bank & Trust Co. v. Signature Fin. Group, Inc.*, 149 F.3d 1368, 1374-75, 47 USPQ2d 1596, 1602 (Fed. Cir. 1998), cert. denied, U.S. , 119 S. Ct. 851 (1999)." While I agree with the Court's analysis of an algorithm, the Court assumes that the algorithm is in an "electronic, chemical, or mechanical" based invention which I would find to be more than a mere recordation of the culmination of an abstract idea separate from the "electronic, chemical, or mechanical" technologies as in the present disclosed and claimed invention.

The Court in AT & T went on to state that "as this brief review suggests, this court (and its predecessor) has struggled to make our understanding of the scope of Section 101 responsive to the needs of the modern world." (Emphasis added.) AT & T at 1450. While I agree that the development of the information era has pushed the envelope of statutory subject matter to embrace [*22] the technological advancement and immense flexibility of the computer software-based inventions, as has the evolution of biotechnology, but here, I find that the claimed invention is not a product of the "modern world" with which the Court has struggled since there is not involvement of the traditional sciences there can be no advancement of the "useful arts" as the Constitution empowered Congress. Therefore, I agree with the majority and would sustain the rejection of claims 1-18 as directed to nonstatutory subject matter. I concur with the majority with respect to their decision with respect to the rejections under 35 U.S.C. § § 112 and 103.

With the holding of the above type of claim as statutory subject matter, abstract thought and analysis of any interest would still be available, but once an individual seeks to record their analysis, they would infringe the present claim at issue. I believe that this was not the intent of Congress or the intent of our forefathers who set forth the authority for our patent system in the U.S. Constitution.

116RW9

***** Print Completed *****

Time of Request: September 07, 2004 08:01 PM EDT

Print Number: 1841:10499559

Number of Lines: 259

Number of Pages:

Send To: MARGULIES, BRUCE
NEIFELD IP LAW PC
2001 JEFFERSON DAVIS HWY STE 1001
ARLINGTON, VA 22202-3617

Attachment 2



Merriam-Webster Online

Merriam-Webster FOR KIDS Encyclopædia BRITANNICA

Merriam-Webster ONLINE Merriam-Webster COLLEGIATE® Merriam-Webster UN

Building Math Tests

The premier Math authoring tool for MS Word, Web, and more!

Elementary School Math

Is your child having trouble with Math in school? Here's help now!

Fractions Step By Step

Software covers fraction concepts to arithmetic. Grade 4-9. Try demo.

Mathcad

Perform, share and doc calculations and design

Ads by

HOME	
PREMIUM SERVICES	▼

M-WCollegiate.com
M-WUnabridged.com
Britannica.com
Multi-User Licenses

DOWNLOADS	◀
WORD OF THE DAY	◀
WORD GAMES	◀
WORD FOR THE WISE	◀
ONLINE STORE	◀
HELP	◀

Merriam-Webster Inc.
Company Information

Merriam-Webster Online Dictionary

4 entries found for **denominator**.
To select an entry, click on it.

denominator
common denominator
least common denominator
lowest common denominator

Go

Main Entry: **de·nom·i·na·tor** (d)

Pronunciation: di - 'nā-m&- "nA-t&r

Function: *noun*

1 : the part of a fraction below the line signifying division that functions as the divisor of the numerator and in fractions with 1 as the numerator indicates into how many parts the unit is divided

2 a : a common trait b : the average level (as of taste or opinion) : **STANDARD**

For **More Information** on "denominator" go to **Britannica.com**

Get the **Top 10 Search Results** for "denominator"

Merriam-Webste

- ☒ Dictionary
☐ Thesaurus



denominator

Ads by Google

Fractions
Decimals

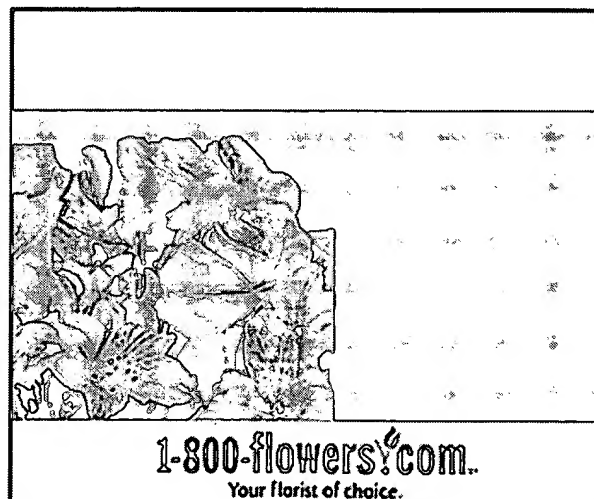
Palm & Pock

Browse and downl Merriam-Webster e-books and game Palm and Pocket P and Mobile Phones
Merriam-Web
Online Store

Handheld Collegiate

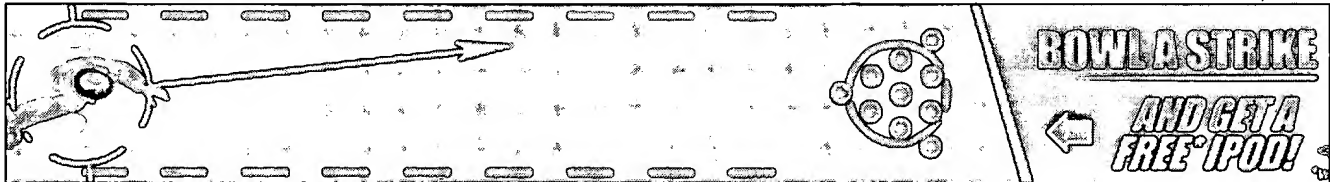
Now you can take Eleventh Edition w anywhere as Frank new Speaking Elec Handheld!
Franklin.com/

Merriam-Wel
Collegiat
14-day Free



1-800-flowers.com.
Your florist of choice.

Attachment 3



HOME	
PREMIUM SERVICES	▼

M-WCollegiate.com
 M-WUnabridged.com
 Britannica.com
 Multi-User Licenses

DOWNLOADS	◀
WORD OF THE DAY	◀
WORD GAMES	◀
WORD FOR THE WISE	◀
ONLINE STORE	◀
HELP	◀

Merriam-Webster Inc.
 Company Information

Merriam-Webster Online Dictionary

One entry found for **demography**.

Thesaurus

Merriam-Webster

- ☒ Dictionary
☐ Thesaurus



demography

Main Entry: **de·mog·ra·phy** (d)

Pronunciation: di-'mä-gr&-fE

Function: *noun*

Etymology: French *démographie*, from Greek *dEmos* people + French *-graphie* -graphy

: the statistical study of human populations especially with reference to size and density, distribution, and vital statistics
 - **de·mog·ra·pher** (d) /-f&x/ *noun*

For More Information on "demography" go to Britannica.com

Get the Top 10 Search Results for "demography"

Palm & Pock
 Browse and downl
 Merriam-Webster
 e-books and game
 Palm and Pocket P
 and Mobile Phones
 Merriam-Web:
 Online Store

Ads by Google

Modesto CA Homes

See a complete list of local homes for sale in Modesto,
 California now
 NewestHomeListings.com

Pop Statistics (Claritas)

Population reports, maps, & data. Reports starting as low
 as \$49.
 www.sitereports.com

demography

Search All Demographics Records Instant Results,
 Worldwide Info.
 www.records.com

Statistical Consulting

Fast, accurate data analysis for marketing research and
 academia
 www.statisticians.net

Handheld Collegiate

Now you can take
 Eleventh Edition w
 anywhere as Franl
 new Speaking Elec
 Handheld!
 Franklin.com/

Merriam-Wel
Collegiat
14-day Free

Pronunciation Symbols

Products

Premium Services

Company Info

Contact Us

Advertising Info

Privacy P

Attachment 4



Free Demographic Reports
1970, 1980, 1990 & 2000 Census
Data All Geographies and Radius
Reports

PCensus for MapInfo
Use MapInfo & demographics to
find Site Locations and Target
Markets.

Workforce Demographics
Hundreds of Facts. Free
Newsletter. Download Sample
Chapters of Book

Research Neighbor
Find crime rates, school
climate info by zip or ci

Ads by

HOME
PREMIUM SERVICES

M-WCollegiate.com
M-WUnabridged.com
Britannica.com
Multi-User Licenses

DOWNLOADS
WORD OF THE DAY
WORD GAMES
WORD FOR THE WISE
ONLINE STORE
HELP

Merriam-Webster Inc.
Company Information

Merriam-Webster Online Dictionary

One entry found for **demographic**.

Thesaurus

Merriam-Webster
☒ **Dictionary**
☐ **Thesaurus**



demographic

Main Entry: **de·mo·graph·ic**

Pronunciation: "de-m&- 'gra-fik, "dE-m&-

Variant(s): *also* **de·mo·graph·i·cal** /-fi-k&l/

Function: *adjective*

1 : of or relating to **demography** or **demographics**

2 : relating to the dynamic balance of a population
especially with regard to density and capacity for expansion
or decline

- **de·mo·graph·i·cal·ly** /-fi-k(&-)lE/ *adverb*

For **More Information on "demographic"** go to **Britannica.com**

Get the **Top 10 Search Results for "demographic"**

Palm & Pock
Browse and downl
Merriam-Webster
e-books and game
Palm and Pocket P
and Mobile Phones
Merriam-Web
Online Store

Handheld Collegiate

Now you can take
Eleventh Edition w
anywhere as Franl
new Speaking Elec
Handheld!
Franklin.com/

Merriam-Wel
Collegiat
14-day Free

Click here

1-800-flowers.com
Your florist of choice.

Pronunciation Symbols

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.